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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,292	03/05/2002	Hirokazu Tanaka	204552022500	3051

7590

07/17/2003

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EXAMINER

BARR, MICHAEL E

ART UNIT

PAPER NUMBER

1762

DATE MAILED: 07/17/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/070,292

Applicant(s)

TANAKA ET AL.

Examiner

Michael Barr

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments and amendments, filed 6/30/03, have been fully considered and reviewed by the examiner. In light of the response, the objections to the drawings and oath have been withdrawn by the examiner. Claims 1-8 are pending.

The applicant has argued against the Boeke and Hirsch references stating that they do not teach using a laser having a wavelength less than 600 nm. These arguments are moot in light of the new grounds of rejections which follows.

The applicant has argued against the Hiraoka reference indicating that Hiraoka teaches a different reaction mechanism than the applicant, in that Hiraoka is a physical reaction, while the applicant is an optical-chemical reaction. The examiner is not persuaded as such reaction limitations not claimed. The applicant's arguments are not commensurate in scope with the claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The applicant has argued that there is no motivation to combine Hiraoka with Boeke. The examiner is not persuaded by the applicant's argument. Hiraoka teaches the claimed process, except that it does not teach the nature of the fillers. Therefore, one skilled in the art would look to the prior art to determine conventional fillers suitable for use in molded polymeric article, made of polymers, such as polyphenylene sulfide. Boeke teaches the use of inorganic fillers, such as silica or fiberglass, in molded polymeric articles, made of polyphenylene sulfide,

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to be electrolessly plated. Boeke shows that inorganic fillers, such as silica and fiberglass, are conventional fillers for molded polyphenylene sulfide, to be electrolessly plated after laser irradiation. Therefore, it remains the examiner's position that it would have been an obvious variation to the Hiraoka process to use inorganic fillers, such as those of Boeke, with the expectation of providing the desired properties to the molded article, depending on the end use, since it is shown by Boeke that such fillers are typical fillers for molded polyphenylene sulfide articles to be electrolessly plated after laser irradiation, which is the desire of Hiraoka et al.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2 and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boeke et al. in view of Hirsch et al. and Hiraoka et al.

Boeke et al. and Hirsch et al. are applied here for the same reasons as given above and in paragraph 4 of the previous office action. Boeke et al. teaches using a YAG laser to irradiate the polyphenylene sulfide article (Col. 6, lines 45-50). Boeke et al. does not teach the wavelength of the laser. Hiraoka et al. is applied here for the same reasons as given in paragraph 5 of the previous office action. Hiraoka et al. teaches using a YAG laser to irradiate the polyphenylene sulfide article, where the wavelength used is 193-308 nm (Col. 3, lines 3-23). It would have been obvious to one skilled in the art to use the YAG laser at a wavelength of 193-308 nm, in

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Boeke et al., with the expectation of providing the desired electroless plating pretreatment on the polyphenylene sulfide article, since it is shown by Hiraoka et al. that such a wavelength is conventionally used in the art for YAG lasers used to pretreat polyphenylene sulfide molded articles for electroless plating, which is the desire of Boeke et al.

4. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiraoka et al. in view of Hirsch et al. and Boeke et al.

Hiraoka et al., Hirsch et al. and Boeke et al. are applied here for the same reasons as given above and in paragraph 5 of the previous office action. Hiraoka et al. teaches using a YAG laser to irradiate the polyphenylene sulfide article, where the wavelength used is 193-308 nm (Col. 3, lines 3-23).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

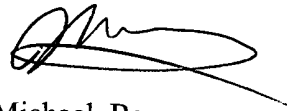
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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Barr whose telephone number is 703-305-7919. The examiner can normally be reached on Monday-Thursday 6:00 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on 703-308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 or 703-305-5408 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Michael Barr
Primary Examiner
Art Unit 1762

MB
July 16, 2003